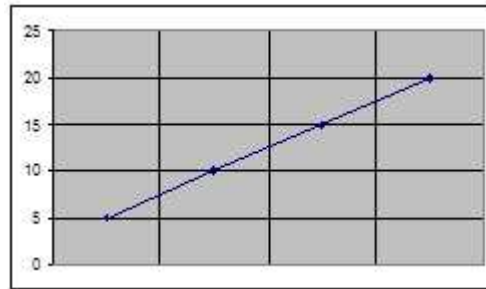


## Post-mortem on Operating System lab: Windows Stress, a Taste of Sys Admin

Gene B. Chase, May 11, 2007

I have put your homework in campus mail, with duplicates to all team members, so that you don't have to try to find your teammates.

❶ (B2) The question of linear! If the samples are 1, 10, 100, and 1000, and you observe a straight line, like this:



1      10      100      1000

then you don't have linear data. I purposely gave as sample data 10, 25, and 40 in A and 100, 1000, and 10000 in B because they aren't evenly spaced. Don't assume that a straight line means linear. A straight line only means linear as a function of a linearly spaced independent variable (horizontal axis). [-2%]

❷ (A12) Say which data are being used to make your claims. [-2%]

❸ (There is no number ❸; I saw that everyone missed what I was looking for, and decided not to include it in the grading.)

❹ (B4) What is the effect of caching the disk? This problem actually came up as points 11 and 12 below as well. The severity depended on (a) how much you thought about, and (b) of that how much you explained as best you could, and (c) of that how much of your explanation held water.

❺ (C1-C5) Extra credit for freezing, if you have a good explanation [+4%]. Weaker explanations earned less. The best solution actually explained how to crash (although was too chicken to do it!). It included things like deleting a kernel component like a device driver, say the DMA driver. You won't be allowed to delete it from the process list, but if you just go to the c:\Windows directory area, you can rename a driver (like disk.sys). Not recommended unless you are prepared to rename it back by booting from a floppy drive or CD from which you can mount the c: drive.

❻ Units? This was mostly a problem with units of time, since sometimes the units were in "percent of CPU usage," and at other times, in units of "milliseconds." [-1% if units are missing; -2% if units are wrong]

⑦ Beware graphs that look like flat 0 if they are on the same axes as graphs of a radically different scale. I mentioned this in lab. If one number is ranging from 0 to 5000, what chance does another number which is percentages 0 .. 100 to have to show anything? [-2%]

⑧ If you did not use the thread count that I offered, say what you did use. [-2% or more depending on whether using the default thread counts made sense.] This is like point 4 above, and 11 and 12 below.

⑨ Please use complete sentences for ease of grading [-0%] Communication skills!

⑩ As promised, you earned extra credit for a well-done in-lab paper turned in along with the paper that all were required to turn in. [up to +4%]

⑪① In Part (B) for disks, you need to pick the size so that *some* disk movement occurs. Preferably a different amount of disk movement for different somethings—threads, or file sizes. [-varying%, more credit lost if if you didn't even think about this issue; less if you thought about it but didn't accomplish it; less yet if you did accomplish it but didn't explain it; less yet if you accomplished it and explained it but didn't explain it well.]

⑪② Under “Notes:” I said, “Use lesser values,” and “use larger parameters.” In other words, don't take my word for the choice of thread numbers. Some of you didn't tell me what values you used for thread count in (A) or in (B). [-5% each] This issue obviously is confounded with point 8 above. And with point 11 above where you must explain yourself.